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[54] CENTRIFUGAL BLOOD PUMP [75] Inventors: Earl W. Clausen, Eden Prairie; Lloyd C. Hubbard, Deephaven, both of Minn. [73] Assignee: Minnesota Mining and Manufacturing Co., St. Paul, Minn. [74] Appl. No.: 426,102 [75] Filed: Oct. 24, 1989 [76] Int. Cl. F04D 7/02; F04D 25/06 and Filed of Search 417/420; 415/900 [77] References Cited [78] U.S. PATENT DOCUMENTS [78] 3,354,833 11/1967 Laing 417/420 X 21/145/536 4/1971 Jacobs 417/420 X 21/145/536 4/1971 Jacobs 417/420 X 21/145/5324 3/1972 Laing 3,645,650 2/1972 Laing 3,647,324 3/1972 Rafferty et al. Laing 417/420 X 21/14/1973 Laing 3,771,910 11/1973 Laing 417/420 X 21/14/1974 Laing 417/420 X 21/14/1974 Laing 41/1974	[45] Date of Patent: Jan. 15, 1991

